EVENT: NAVY RESTORATION ADVISORY BOARD (RAB)

DATE: July 14, 2005

START TIME: 7:00 P.M. **ENDING TIME: 8:45 P.M.**

LOCATION: Hyatt Regency Hotel Ballroom

MIKE GAWEL (Co-Chairperson):

"We would like to update you with what is going on with the cleanups at these restoration sites and to answer questions you need help with or concerns with site cleanups. To get this moving this evening I would like to introduce the Co-chairman, LT. Kenneth Culbreath, from the Navy. He and I will co-chair this meeting, and I would also like to note that we will have the assistance of Mr. Roy Tsutsui as the facilitator, who will make sure that your questions are answered carefully the best we can. We have other representatives from the Navy and their consultants, who will be presenting information to us this evening. There will be three separate presentations.

The first one will be by Ms. Darlene Ige, who will go over a comprehensive list of many different sites that are receiving attention on the base cleanups. Following that we will have a presentation on the Area Behind the Ship Repair Facility Fenceline site, and what's going on with that cleanup. This will be presented by Ms. Jan Kotoshirodo. Finally, we'll have another presentation on the Fuel Valve Pits at Tenjo Vista, Sasa Valley, and Fueling Wharves and that will be by Mr. John Fern.

I would like to note that if you haven't picked up information sheets, there are plenty of them on the desk at the entrance to the meeting room here. These give us background on what we'll be presenting tonight and a summary of many different sites that are involved with the cleanup. Again if you have any questions, please feel free to ask and as part of the meeting tonight, we'll be going over the proposed plan for the Carpentry Shop Dip Tank cleanup requirements. All these are being recorded.

As you might also note, there are minutes of our last meeting and again, this meeting is being recorded."

ROY TSUTSUI (Facilitator):

"Thank you for coming tonight and again, this is an open forum. It is your meeting. Anytime you have a question, we'll be glad to answer them. If we cannot answer them we will get back to you, but we'll try to answer all your questions tonight. And again, because it's your meeting, feel free at anytime, even while there is speaking going on, go ahead and help yourself to the food, drinks and anything like that. You don't have to wait 'til the breaks or anything like that."

NAVY RESTORATION ADVISORY BOARD (RAB) MINUTES:

MIKE GAWEL (Co-Chairperson):

"Next we will be calling on Darlene Ige to start her presentation."

DARLENE IGE:

"Tonight I am going to update you on the Navy Installation Restoration Program in Guam. There's a total of nineteen IR sites in Guam, of which we have completed [cleanup of] three of the sites. On the three that we completed are the Ritidan Point, USS Proteus Fire Fighting Training Area and the NEX Garage septic tank. We have three sites that are pending closure, which means that we completed the investigation and their cleanups and we are either doing long-term monitoring or just preparing the closure documents. They are the Construction Battalion (CB) Landfill (that one we're doing long-term monitoring); the Dry Cleaning Shop and the Carpentry Shop Dip Tank we're doing closure documents. We have five sites that we're currently working on: the Orote Landfill, Building 3009, Lower Sasa Fuel Burning Pond, the valve pits, and the area behind the SRF fence line. In addition, we have eight sites that we'll be addressing in the future. As we begin work on these sites I'll be including them on the update.

Tonight I want to focus on the sites, that are pending closures, that are in progress. The first site that is pending closure as you can see on this map... two of these sites are located within the naval base. They are the Dry Cleaning Shop and the Carpentry Shop and then we have the third site, which is the CB Landfill that's located up north in Finegayan.

Construction debris and scrap metals were disposed of at the CB Landfill. We completed the construction of the landfill cap in 1998. We were doing quarterly groundwater monitoring from '98 to 2001. The results of that five-year quarterly groundwater monitoring show that the ground water quality were better than federal and territorial drinking water standards. Therefore, we had abandoned the seven onsite wells in 2003.

Since October 2001, we were conducting semi-annual ground water monitoring, and we are still doing that. The current monitoring program includes landfill gas sampling as well as groundwater samples at two wells that are up-gradient from the landfill and also the down-gradient coastal spring. We prepared a draft revised general site work plan that describes the maintenance that we will be proposing. The draft came out in May of 2005, which is undergoing regulatory review. We hope to finalize that in August and then prepare the decision documents based on that.

At the Carpentry Shop Dip Tank site, the concern was chemical due to wood preservation. The area of concern was this grass area right here (pointing to the map), right in front of the building. We conducted a remedial investigation in 2001. The remedial investigation recommended that there was "no further action" [needed] on the groundwater, but [that] we should remove the dioxin-contaminated soil. In 2002 we did a cleanup where we took out about 15 cubic yards of dioxin-contaminated soil. After that cleanup we did a proposed plan, which recommended "no further action" for this site.

We are currently preparing the decision documents for that, and the draft should be out this month.

The Dry Cleaning Shop was in operation from 1952 to 1975. The contaminants of concern at this site are fuel hydrocarbons and other solvents which are petroleum-based products used for dry cleaning. We completed the remedial investigation in 2002. The result of this investigation showed that this site did not pose a risk to human health or the environment. But it was based on that the petroleum hydrocarbons would naturally degrade. In February of this year we took additional samples just to confirm that natural degradation is occurring. The results were that it is [occurring]. So we are preparing a "no further action" decision document for this site. The draft did come out in May and is currently going regulatory review, and we hope to finalize that decision document in September of this year.

Now I would like to talk about the sites we are currently working on. As you can see on this map there's five sites around Apra Habor. Two of these sites, the Lower Sasa Valley burning pond and the fuel valve pits are located on the outside of the naval base. The other three (the Orote Landfill, the area behind SRF fence line, and Building 3009) are located within the naval base.

At Orote Landfill, we constructed a landfill cap and a seawall back in March of 2001. If you recall in September of 2001, the Guam Department of Public Health issued a Seafood Consumption Advisory, which extended from Orote Point to Nimitz Beach. Then in May of 2002, they revised the advisory from Orote Point to Rizal Beach. Between 2001 and 2003 we were focusing on the human health aspect of this site and the findings of the Seafood Advisory. Now we are focusing on the groundwater and the ecological risk assessment. We initiated a groundwater investigation last year, which included a dye trace study and quarterly groundwater monitoring for a year. We are currently assessing the results of the groundwater monitoring and we'll provide a detailed presentation at next month's RAB, which will be August 25th on this site.

Building 3009 was a former Transformer Repair Shop. The source of the PCB contamination was removed in March of 1997, when we removed about 11,800 tons of PCB-contaminated soil. We treated that soil using a base-catalyzed decomposition process. Now we are assessing the rest of the sites. We are conducting a Site Inspection and finalized the planning documents last July. We conducted the fieldwork from between August of last [year] and February of this year. That included taking soil samples as well as two rounds of groundwater samples. The draft SI (site investigation) report documents the results and recommendations, which is scheduled to come out in September of this year. We are also working on a draft Removal Site Evaluation planning document, which describes the work that we'll be doing to support a cleanup. That planning document is scheduled to come out in September of this year.

Fuel-related chemicals are the concern at the Lower Sasa Fuel Burning Pond. We removed the source of contamination, which was the evaporation pond in 1999. We conducted a screening ecological risk assessment for the [Marianas] Moorhens, and we

completed that in March of this year. The results of that show that the site does not pose a risk to the Moorhens. Right now we are preparing a workplan for the additional samples for the area that was in the former evaporation pond, right here (referring and pointing to the map). We are taking additional samples and once we finalize that plan, and take the samples, and incorporate information, into the design documents, which is scheduled to come out next spring, the clean up should follow shortly thereafter.

At the Fuel Valve Pits, this site includes a total of seventeen valve pits that were part of the fuel distribution system. The chemicals of concern are fuel-related chemicals and petroleum hydrocarbons. A site inspection is being performed to assess whether the contamination associated from past releases exist at the valve pits. So we prepared draft planning documents, which describe the work we we'll be doing, in May of this year, and it's currently undergoing regulatory review; and we hope to finalize those documents in August so that we can get out into the field in August. A Site Inspection report, which will document our results and recommendations, will come out in spring of next year. For this site, a more detailed presentation will be presented later tonight.

The area behind that SRF fenceline was used as a former disposal area for sandblast grit, dredged materials and other wastes. The chemicals of concern at this site includes metals, petroleum hydrocarbons, pesticides and PCBs. We completed a remedial investigation in 1995 and based on that investigation, there's no concern for human health but there are some concerns for ecological receptors in certain portions of this site. We initiated a removal site evaluation to take more samples at the site and to do an ecological risk assessment. Our draft planning documents describe what work we'll be doing. We completed that in May of this year and [they] are under regulatory review also. We hope to finalize that by August of this year so that we can start the fieldwork in September. A more detailed presentation on this site will be presented later tonight.

I just want to show you where the future IR sites that we'll be working on are, we haven't started it, so I don't have any information but I just want to show you the general location of these sites (referring and pointing to the map). Two of the sites, the Building 27 Boiler Facility and the X-ray Wharf, are located within the naval base. The remaining seven IR sites are located outside of the naval base and as you can see, it's throughout Guam. We have transmission lines, substations, power plants, a tear gas burial site, the Barrigada golf course landfill site; another substation and another power plant.

The next two slides, (referring and pointing to the chart) I just wanted to give you an idea of the magnitude of this IR program in Guam. This chart here shows what we spent to date. We've spent a total of about $83.5 million dollars since 1990. As you can see on this chart, there are some peaks. In 1992 this is when we started all our investigations of all the IR sites in Guam. So we spent a total of $17 million that year. This other peak here in 1996, this is when we were doing the Building 3009 PCB treatment using the base-catalyzed decomposition process. This other peak here in 2000 is when we were constructing the seawall and the landfill cap at Orote. Since then, from 2000 to 2005, we've averaged about $2.4 million dollars per year; mostly focusing on Orote because of the seafood advisory. In fiscal year '05, we spent about $4.3 million dollars and that was

mostly spent on the sites we are currently working on: the Orote landfill, Building 3009, the valve pits and the area behind the SRF fence line.

This next graph (refers to present slide) shows what we estimate to complete the IR program in Guam. We're estimating we need another $36 million dollars from fiscal year '06 out to '15. So for the next ten years we are estimating that we'll be spending an average of $3.6 million dollars per year. In '06, which is the upcoming year, we're going to spend about $5.7 million dollars, which is going to focus primarily on the cleanups of the sites we are currently working on. That's all I have unless there's any questions."

ROY TSUTSUI (Facilitator):

"Are there any questions?"

MIKE GAWEL (Co-Chairperson):

"I guess if there are no questions...if you come up with questions later on the subject, we'll certainly answer them; otherwise I guess we can move on to the next presentation."

ROY TSUTSUI (Facilitator):

"Thank you, Darlene. Also I wanted to let everybody know that Darlene is in charge of the Installation Restoration (IR) program for the entire Navy-Pacific, not just Guam, so we're thankful that she could to come over here and tell us about the overall program."

MIKE GAWEL (Co-Chairperson):

"Jan, are you ready? Jan will do a presentation on the area behind the fenceline of the Naval Ship Repair Facility."

JAN KOTOSHIRODO:

"Good evening. My name is Jan Kotoshirodo, I am the Navy's remedial program manager for the Installation Restoration Sites on Guam. This evening I'll be presenting a summary of our plan to perform a removal site evaluation for the area behind the Navy Ship Repair Facility, or SRF Fenceline site. The area behind the SRF Fenceline site is located in the western region of Guam, in the Apra Habor area. As shown here (referring and pointing to the map) in orange, this site is located on the main Navy base of COMNAVMARIANAS.

Shown here (refers to photo) is an aerial photo of the site from the mid-1990's and the entire site encompasses approximately 57 acres; (pointing) to the west is Sumay Cove, and to the east is where the former Navy Ship Repair Facility was located. The site includes two topographical depressions, which form wetland areas, one on the north and one on the south, and these wetland areas are potential areas that could support wildlife including the Marianas Moorhen. The site was originally a low-lying swamp area that

was filled in over the years and was also used to dispose of various wastes from operations at the Ship Repair Facility.

Shown here (refers to photo) is an aerial photo of the site in the mid-1950s. Again, it borders Sumay Cove to the northwest and then the former Ship Repair Facility. As you can see here, much of the area had been filled by this time, between the mid-1950s thru 1973; some areas on the site were used to dispose of various wastes, and those included things like sandblast grits, scrap metals, construction debris and telephone poles. In 1973, those waste disposal activities ceased and a fence was constructed to separate the site from the former Ship Repair Facility. I should just mention also that waste disposal activities occurred on the south-southeastern portion of the site adjacent to the former Ship Repair Facility.

Shown here is a timeline for this project prior to our current work to perform a Removal Site Evaluation. We completed three prior studies or investigations at the site. First was an Initial Assessment Study that was completed in 1983, and that Initial Assessment Study was basically a preliminary assessment to determine whether or not there was a potential for contamination to exist at the site. And it consisted of historical record searches as well as interviews. We then moved on to a Site Inspection between 1990 and 1991 and that Site Inspection was conducted to confirm whether or not contamination did exist at the site. It included limited sampling and that data was used to determine whether or not further actions and investigations were required. Based on our recommendations from that Site Inspection, we proceeded with the Remedial Investigation that was completed in 1995, and the Remedial Investigation included further sampling at the site and the purpose of that was to try to get a better handle on the source as well as the extent of the contamination at the site. That data was also used to determine whether or not the site itself was safe for humans as well as plants and animals.

Based on recommendations from the Remedial Investigation, some portions of the site were recommended for cleanup but prior to performing our cleanup action we are now conducting a Removal Site Evaluation, and the purpose of the Removal Site Evaluation is to collect a little more data from the site to get a better idea or to find the area within the site that requires cleanup. We already initiated this effort with a draft work plan, and that was completed in May of this year, and is currently under regulatory review; and we plan to finalize that document and then perform the fieldwork in September of this year.

Once we complete our fieldwork and our investigation, we're going to have that information and it will be presented in an Engineering Evaluation and Cost Analysis report and that document will also include a comparison of potential cleanup alternatives for the site and it will also recommend a selected cleanup action. That document or draft document will be made available for public review and comment. We'll finalize that document and then we'll prepare an action memorandum, which will formally document the selected cleanup action. We will then perform our cleanup action and complete site closeout.

NAVY RESTORATION ADVISORY BOARD (RAB) MINUTES:

As I mentioned briefly on a previous slide, prior to this Removal Site Evaluation a Remedial Investigation was conducted, and the purpose of that Remedial Investigation was to evaluate a potential contaminant sources at the site, to define the extent of the contamination or concentrations of the chemicals in soil, sediment, surface water and groundwater, and to use that data to determine whether or not the site is safe for humans, plants and animals.

During the Remedial Investigation, the site was divided into two primary areas: the first being the entire northern portion of the site, which was called the north wetland area, and the entire southern portion of the site, which was called the south wetland area. During the Remedial Investigation, it was found that the entire northern portion of this site or north wetland area was safe for human, plants and animals. For the south wetland area, this area was found to be safe for humans; also "no further action" was recommended for groundwater. However, for soil and sediment at this site, there were chemicals of concern that were identified for plants and animals. Those chemicals of concern include metals, polychlorinated biphenyls or PCBs, pesticides, and polynuclear aromatic hydrocarbons or PAHs.

We are now conducting a RSE to follow up on the recommendations from the Remedial Investigation. The objectives of this Removal Site Evaluation are: to define and delineate the areas within the southern portion of the site that require clean up; to evaluate which areas are safe for plants and animals; and to basically incorporate that data into an Engineering Evaluation and Cost Analysis report which will allow us to compare potential remedial actions or cleanup actions for the site, and also to help us select the appropriate cleanup action.

Shown on this slide are the locations where we plan to collect soil and sediment samples during our Removal Site Evaluation. This is the entire southern portion of the site, which was recommended for further evaluation in the Remedial Investigation and it's subdivided into six functional areas which are defined based on physical site characteristics as well as the types of waste that were disposed of in the various areas. Essentially, there are two fill areas; the northeast fill area and the southwest fill area. The center portion of the site is the topographic depression, which includes two wetland areas: wetland areas one and two and then two primary waste disposal areas, which are the sandblast grit peninsula and the looped road disposal area.

For the purpose of this Removal Site Evaluation we are not going to be collecting any samples from the two primary waste disposal areas, which are the primary sources of contamination at the site being the sandblast grit peninsula and looped road disposal area. The reason for that is we do have sufficient data from the previous remedial investigations to move on to our Engineering Evaluation and Cost Analysis to determine an appropriate cleanup action.

For the remaining portions of this site, we are collecting additional samples, which will be for the two fill areas, and wetland areas. We did not have sufficient data during the Remedial Investigation to conclude whether or not these areas are safe for plants and

animals. So we are going to go back out there to collect additional data to draw those conclusions. For wetland area one, that area was recommended for a cleanup action during the remedial investigation. However, we are going back to collect additional samples to further define and characterize the extent of the contamination that extends out from the primary waste disposal areas. Also, depending on site conditions during our field sampling efforts we plan on taking or collecting surface water samples from the wetland areas.

So for our schedule, again we've already completed our draft workplan for this Removal Site Evaluation, and we plan on finalizing that document as we receive our regulatory comments. We'll then proceed with our fieldwork in September of this year. Then the results will be presented in an Engineering Evaluation and Cost Analysis report, which again will help us to select an appropriate clean up action. The draft document we expect out next summer, and again that will be also made available for public review and comment. Then will finalize that document and then prepare an action memorandum, which will formally document our selected clean up action.

And that's it. Are there any questions?"

ROY TSUTSUI (Facilitator):

"Are there any questions?"

QUESTION BY A GENTLEMAN (UNIDENTIFIED):

"Maybe I missed it, have there been any studies or ongoing investigations to off-site impacts?"

ROY TSUTSUI (Facilitator):

"Off-site impact from this site, here?"

UNIDENTIFIED GENTLEMAN:

"Right."

ROY TSUTSUI (Facilitator):

"Okay, so the question is basically, if you go back to the map. He sees all the samples inside and he wants to know if there has been enough information to show there is nothing off-site."

JAN KOTOSHIRODO:

"During the Remedial Investigation, sampling was done for the entire site not just the southern portion. It did evaluate potential migration pathways for contaminants, for

instance to the effect on ecological receptors such as plants and animals in Sumay Cove. So that was all evaluated during the remedial investigation."

UNIDENTIFIED GENTLEMAN:

"And the result was that there was no significance?"

JAN KOTOSHIRODO:

"Correct."

ROY TSUTSUI (Facilitator):

"Basically if you could just summarize the results showing why you're not sampling anymore out there."

JAN KOTOSHIRODO:

"We did collect tissue samples both on-site as well as in the cove and the results were that there were no risks for either human consumption or plants and animals. (for the northern portion of the site)"

ROY TSUTSUI (Facilitator):

"So through your characterization studies leading to this phase in your work, you nailed it down to 'this is the area of concern'? Also in our previous RAB meetings, as Jan showed these different stages, RAB is involved from step one all the way to the end step. So during the earlier steps in which they're presenting the data, trying to find the locations and narrow it down, that information is being provided and now we are at the stage, if you can go back to the slide showing the stage. Now they are already at removal stage here and so they pretty much figured out where its at, little more information on that site that she's showing you but she already has enough information for her to cleanup on certain portions. They're going to finalize the rest of that portion but they are already at this stage now. Did that answer your question?"

UNIDENTIFIED GENTLEMAN:

"Oh yes. I'm not too familiar with the process. Please forgive me. Thank you."

ROY TSUTSUI (Facilitator):

"No problem, and the way we work this is even though this is a restoration advisory board, the way the Navy operates our boards, we open it to the public and any member, any person that comes in at anytime during the process is an automatic member and can ask questions at any stages because we want to keep it completely open. Whereas, if you

go to any other type of restoration advisory board, it's a finite set of members; and they do that for a certain amount of continuity, and that way they can keep moving towards that. However, we keep it completely open so we welcome those kinds of questions. No problem. Any other questions? Okay."

MIKE GAWEL (Co-Chairperson):

"Thank you Jan. We'll proceed and continue on and ask John Fern to present our last major site discussion."

ROY TSUTSUI (Facilitator):

"And again, help yourself anytime rather than wait for breaks or any kind. Just help yourself to the refreshments."

JOHN FERN:

"Thanks Mike and Roy. As Mike mentioned, my name is John Fern and I work for Earth Tech, and we're consultants for the Navy. I've been doing work here in Guam for about sixteen years. I've been following a lot of these sites through process. Mike mentioned since the beginning of this meeting, this is the newer site that we are going to be working on and consists of seventeen valve pits. As Darlene showed you on her presentation, an example of one of those valve pits. Here is a map (referring and pointing to the map) showing where those valve pits are located. There's a series of valve pits here out of fuel wharf compound that supplies fuel to the ships at Delta/Echo priers. There are six valve pits here and it is across a Tank Farm, which is just up in the hills from the main fuel facility, which is located right here (referring and pointing to the map). There are four valve pits and then the last remaining seven valve pits. Excuse me, down in Tenjo Vista Tank Farm, which is located there.

I'll show you a series of aerial photos taken in 1994, showing the locations of these valve pits. This is the fuel wharf compound and you'll see that there are five valve pits located right outside the Delta/Echo priers, which is located here, and then further in towards Marine Corps Drive, which is just off the map here, is another valve pit right at the corner of these two access roads that leads out to the valve pits.

Here are the four valve pits at the Sasa Valley Tank Farm. There's one just behind the compound here, the main part of the Navy fuel division offices and some of their tanks located here. This is Marine Corps Drive, the point of reference. So when you go up to, up into the hills here, there are three more valve pits that are located here. Here are the remaining seven, which are located at Tenjo Vista Tank Farm, which is further down towards the Navy base. There are series of five here, right on the road and then there's two more, right here.

So being this is a new site, we are not too far in the process. In 1994, these valve pits were identified for investigation as part of a construction project where they were lining

the pits. These valve pits range in sizes from about six feet by six feet to approximately about thirty feet by thirty feet. They are about six feet deep and back prior to 1994, they were unlined. So there is concrete on all sides and there are stairs leading down into them. What they did was they serve as access points for the fuel position post to turn on valves, control the fuel, and as needed to supply fuel to the ships and also to fuel the tanks back up.

In 1994, during some inspections that were done in preparation for lining the bottom of some of these valve pits, they discovered that through direct drips and leaks some of the soil in the valve pits had been impacted with fuels coming from the pipe lines. That's how these seventeen valve pits got identified. Right now, we are in a Site Inspection phase, as we call it. That's when we go out and take samples to determine the extent of the fuels in the soil under the lines and these valve pits. We just completed the planning document, which describes how we are going to collect samples and assess these valve pits to determine what amount the impact of these fuels have. The planning document is currently in regulatory review. We work very closely with Guam Environmental Protection Agency and other agencies where we provide our draft workplans and when we get any comments they might have, we respond to those comments and incorporate these comments into the final work plans; and that's scheduled right now for August 2005.

Following that, we get out into the field, and we take samples. Right now we are planning on taking soil samples from the sub-surface and from beneath and right into the floor of these valve pits. That will be done in September of 2005. Then we will write our report with findings and recommendations. After that, depending on the outcome of those investigations we may need to take several spot actions or cleanups and if not we will move right to decision documents and close out any sites that don't require further actions. Here's what a present valve pit looks like inside, nothing real fancy here. We got a series of pipelines as you can see here and each of the different sizes carries different types of fuels. These valves here, these are green, for diesel fuel. These valves are used to control the fuels in and out through these pipelines. As you see from the grass beneath them, this is one of the unlined valve pits. Of the seventeen, eleven of them are currently lined with concrete and the remaining six are still unlined. They are planning to line them but we are going to ahead and do our investigation prior to the lining of the remaining outfit.

Here is a larger valve pit as you can see here...."

QUESTION BY A GENTLEMAN (UNIDENTIFIED):

"John... John when you say lined. You mean concrete?"

JOHN FERN:

"Yes, concrete as the lining material."

UNIDENTIFIED GENTLEMAN:

"Not berm...not other berm materials, just concrete."

JOHN FERN:

"Yes, that's correct."

ROY TSUTSUI (Facilitator):

"He just wanted to make sure. You know sometimes you have that polyethylene or that burlap bag. He just wanted to clarify that liner is concrete."

JOHN FERN:

"And the reasons for the concrete are twofold. One is that it allows for good footing for anybody who has to go down the valve pits, but also any little minor drips that might occur during the operation of the valve pits is captured by the concrete and then evaporates itself. It doesn't get down to the soil. So one of the objectives that we're doing as part of the site inspection, we needed to determine whether or not the soils beneath the valve pits have been impacted by fuels or fuel-related chemicals. The type of chemicals we look for include organic chemicals that are in the fuels and also lead.

Once we collect samples we'll be able to determine whether or not there is any fuel-related chemicals in soil samples and that will help us determine whether or not those valve pits require further actions or not. So to meet those objectives, as I mentioned, we are going to be collecting soil samples for each of the valve pits that you see listed there and we'll be sampling each of the valve pits. For the ones that don't have concrete in the bottom we'll be collecting samples right there at the base right beneath the pipelines. For those that do have a concrete lining, it's a very tight space as is shown from some of these photographs. So we can't get sampling equipment in there so what we'll be doing is sampling right next to immediately adjacent to the valve pits. I'll show you a diagram on the next slide that would [show potential impact]. Then we'll send those samples, send them off to an analytical laboratory that will analyze them for various chemicals and determine whether or not they have been impacted. We are also going to analyze selective soil samples for what we call physical parameters to help us determine whether or not, or excuse me, whether... what sort of soil characteristic we have beneath and around those valve pits. How does the water move through the soil and if there were any chemicals released, how would those chemicals move through the soil as well.

Here's the diagram I mentioned. This is one of the valve pits at Tenjo Vista. And we'll be collecting soil samples from these borings that you see here and the bottom of the valve pit is somewhere down here, the yellow dashed line depicting the fuel line that runs through this area. It comes from the tank and it comes from the other valve pits and heads down and ultimately out towards the fuel wharf. So we have to be very careful not to hit those during our investigation. But for most of the valve pits we'll be generally

treating soil around the valve pits. We'll be collecting soil samples right at the base of the valve pit and then five feet below that, and another five feet below that. So approximately five feet, ten feet, or fifteen feet below the ground surface.

Here's a schedule for our work. As I mentioned before, we're going to be finalizing our planning documents. We are scheduled right now to go out to the field in September. Then we'll be doing...we'll be preparing a draft report that will document our findings and recommendations for the work and that will be in the spring of 2006. We will make that report available to you all as well as regulatory agencies and we'll finalize that in the summer of 2006.

With that, are there any questions?"

ROY TSUTSUI (Facilitator):

"Do you have any questions? Yes?"

QUESTION BY A LADY (UNIDENTIFIED):

"You know you said you have six Tenjo Vista unlined but all the others are lined. Are you saying you are not going to line them until you find the sample that shows that there are chemicals of concern?"

ROY TSUTSUI (Facilitator):

"Okay, you mentioned six unlined pits and she's concerned about what are the plans to line those pits. Are you just going to wait until they do analysis and then turns out they are never going to line those pits?"

JOHN FERN:

"There is a construction project that's actually already been awarded to a contractor to line the pits and regardless of our investigation they are going to line the pits. We have the opportunity to actually go in before they do the final lining of those last six pits and take soil samples and so we are going to take the soil samples and then they'll be lining them right afterwards."

UNIDENTIFIED LADY:

"Is it in the schedule?"

JOHN FERN:

"It's in the schedule."

ROY TSUTSUI (Facilitator):

"We would like to know about when will the lining project begin?"

JOHN FERN:

"The construction schedule is separate from what we're doing here. This is really what we are looking at and haven't had the opportunity to talk to these officials before the contractor gets to them."

ROY TSUTSUI (Facilitator):

"Right, but when will the construction begin, in terms of the schedule?"

JOHN FERN:

"We spoke with the fuel's division director yesterday and mentioned that this will probably happen towards the end of this calendar year. So, pretty soon."

ROY TSUTSUI (Facilitator):

"Any other questions? Mike."

MIKE GAWEL (Co-Chairperson):

"I have a question. I don't know who can answer this, maybe someone can. The fuel lines also extend beyond this IR site. I wonder if there is concern about the valve pits and where the lines have been going. Don't they occur elsewhere? Maybe there are fuel lines that go up through the North into facilities, through Agana Heights, Tiyan, and up North. Would there had been similar valves like these, had there been fuel supplied to Naval Air Station? I remember that."

ROY TSUTSUI (Facilitator):

"Okay, essentially you pointed out how many... seventeen or something, fuel valve pits that the study was looking at. His concern is, don't you have other valve pits...did you look at all valve pits before you came up with these seventeen or are there valve pits that are not going to be studied at all?"

JOHN FERN:

"That's a good question. As part of this project...I recall that there are approximately thirty valve pits that were going to be lined and of those there's a subset that they tested and they found that there was some fuel-related chemicals... they don't know how much... maybe very small, maybe larger than that, we don't know yet. That's the purpose of our investigation. Those were typical throughout the facility."

ROY TSUTSUI (Facilitator):

"In other words, you 're saying that they... when you... the number of thirty or so, looked at all valve pits from all the fuel pipelines that Navy... even the ones that traveled up north and what came out of that preliminary look were these seventeen or so...is it seventeen?"

JOHN FERN:

"Seventeen. Yes."

ROY TSUTSUI (Facilitator):

"So these seventeen came out as needing further studies."

JOHN FERN:

"That's correct."

ROY TSUTSUI (Facilitator):

"Any other questions? Yes."

QUESTION BY A GENTLEMAN (UNIDENTIFIED):

"I have one question and one comment."

ROY TSUTSUI (Facilitator):

"Sure."

UNIDENTIFIED GENTLEMAN:

"My question is, so the valve pits that were lined or going to be lined they're considered to certain degrees impervious to oil spills and also to water? When it rains, these pits will fill up with water."

ROY TSUTSUI (Facilitator):

"With rainwater."

UNIDENTIFIED GENTLEMAN:

"With rainwater and if not properly maintained, which maybe in the past they haven't been, surely whatever fuel did leak into a lined valve pit, found a path to leave the pit and go to the surrounding soil, away from the pit. I remember now that soil samples will be

collected from the area surrounding the pit so that kind of makes my question moot in a way. But my other point, I know just recently in the news, there was a report of somebody had fuel in their water well and the leaking is next to one of these fuel line if I'm not mistaken. My question is similar... because of this will you be going back to the previous pits and re-evaluating the ones overlooked?"

ROY TSUTSUI (Facilitator):

"Yes. Okay."

UNIDENTIFIED GENTLEMAN:

"Maybe not just valves. Maybe specific connections. Maybe tees, thrust supports,... critical points like that."

ROY TSUTSUI (Facilitator):

"Okay. Basically two questions of concern, the first one, because the concrete is impervious, obviously they fill up with rainwater and if there's any kind of leaks in there, although you contain it, if there is an overflow, the whole point of trying to prevent release is not letting it overflow. So is there anything in terms of operational process to ensure that it doesn't overflow? First of all."

JOHN FERN:

"To answer that first question, as I did mention, as part of the construction project, they are going to be covering the top of the valve pits to prevent rainwater, mostly rainwater from getting in and whatever little does it will evaporate. Right now, if they fill up and they fill up too far to such that they get down-base of the pipelines, then they have the option of pumping that water out and handling and disposing it properly."

ROY TSUTSUI (Facilitator):

"So essentially, they also address that issue of overflow and it looks like the engineer's design the way you prevent rainwater from actually going in, plus through inspection period, if they do see any water in there, they have a way to pump it out. So that helps reduce environmental release even from an impervious pit."

UNIDENTIFIED GENTLEMAN:

"Are any of these pits designed with existing drains even if they are...according to...some valve pits come with a little drain like so that... to prevent... water pits have that for example. Do any of these pits?"

ROY TSUTSUI (Facilitator):

"He's asking if these pits will also, as part of the design, have drainage?"

UNIDENTIFIED GENTLEMAN:

"The existing pits, I am sorry, not the new ones. I'm sure the new ones are under the new design standards but the older pits. Do they have drains?"

ROY TSUTSUI (Facilitator):

"So, like, the older pits, do they have drainage?"

UNIDENTIFIED GENTLEMAN:

"Because the lined pits do have."

JOANN MASON (NFM):

"Yeah. I think last year we did have (Navy) OICC. Contracts to put drainage on a lot of these valve pits. "

ROY TSUTSUI (Facilitator):

"And where do the drains go to?"

JOANN MASON (NFM):

"It's locked. It's made so that...it's made to be drain -controlled."

JOHN FERN:

"Manually drained. It's shut otherwise with a control patch net."

JOANN MASON (NFM):

"And it's locked."

UNIDENTIFIED GENTLEMAN:

"And that was recently done."

JOANN MASON (NFM):

"No...that was almost two years ago. I did the contract administration on the fuel sites."

ROY TSUTSUI (Facilitator):

"Yeah, but these are referring to...this program was looking at from...since day one when they actually have these pits and obviously they didn't have linings in them...and therefore doesn't even get drained, it goes right through the ground. So those are ones that they are really concerned, about for sure. Especially the ones that passed the first test of which ones have concerns. And what Joann is saying is that for anything that's designed like within the last how many years or so?"

JOANN MASON (NFM):

"It doesn't matter. It just depends on whenever they are needed for."

MIKE GAWEL (Co-Chairperson):

"Since they have been installed."

ROY TSUTSUI (Facilitator):

"Yeah, since they have been installed. That they do have drain valves, however, there is a process to insure that when they release the rainwater that there is no actual sheen in there, also if they do have the sheen in there, they'll have it pump out first.

Okay. Now going to the second question. Looking at the...how you looked at it at the beginning when you came up with like around thirty potential sites, he was saying that there was a news of about a recent release along a fuel pipeline, the one Mike was mentioning, that goes up north and if that's an example of a leak, and I think that was from like a check valve. So this study is looking at valve pits but he was saying is there a need to go back because of this as an example to look at not just valve pits, but also check valves, joints any other potential areas that could be operational leaks like the one that occurred?"

JOHN FERN:

"The Navy has two programs to address. This type of situation, they have... we're talking about tonight, which is to address older types of spills and leaks which have occurred. They're called the Installation Restoration Program. Then we also have a current program that handles all the operational, it's a support program essentially it's a compliance program for all the operations throughout the Navy base. For that particular leak, that you might have read on the paper last week, that's something that's being handled by the compliance program. So if there's any type of current releases that occurs, then they'll response to that as quickly as possible and get out and address that.

For the past releases, you're asking me questions... well how do we know that there wasn't something that we missed. Well, we do the best job we can with respect to that- we look in and we target areas that are most likely to be impacted by chemicals first and foremost. So we are judgmental in the way we do our samplings. So we go right to the area where it's most likely to have been contaminated. We're conservative from that

standpoint, however, there are rare instances where we may miss something and if we do, the government is fully responsible to go back and address those too. Things discovered at a later date.

So, for these valve pits as an example, what they did is they sampled the soil immediately beneath the pipelines. If they did not see any fuel related chemicals then it's probably pretty safe to assume that it wasn't a release of that valve pit whereas they did at the others, these seventeen that we're dealing with and that's why those got added to the list. That's what we are talking about."

ROY TSUTSUI (Facilitator):

"Besides the valve pits, during the initial... initial ... when you're looking for potential sites along the fuel lines, did you include higher potential sites like check valves or joints or things like that?"

JOHN FERN: (I think this response was made by LT Culbreath, not John Fern – regarding questions on the pipeline fuel release just prior to the RAB meeting. This information is not related to the SI for the 17 fuel valve pits.)

"But that's like the same question as well. It was actually an air relieve valve pit manhole enclosure. There are plans right now to go in and actually install an attachment for that."

UNIDENTIFIED GENTLEMAN:

"For just that particular one...or perhaps inspecting?"

JOHN FERN: (Again, I think this response was given by LT Culbreath regarding the recent fuel release)

"For that particular one, we do have again like the inspection program which is supposed to prevent many things and control inspections but we try to get out to all sites as a requirement and I'll tell you, I am not going to say too much about the on-going site investigation which we haven't had a chance to confirm with Guam EPA but we have also taken samples and we are also looking at developing site inspection plans."

ROY TSUTSUI (Facilitator):

"So essentially they share that concern at looking back especially after that incident. Any other questions?"

JOHN FERN:

"Thank you very much."

NAVY RESTORATION ADVISORY BOARD (RAB) MINUTES:

MIKE GAWEL (Co-Chairperson):

"I'd like to thank you all for being here. I'd like to mention it...I think [for] the next meeting some of the topics will include the Orote Landfill cleanup which relates to the fish advisory and I've been hearing expressions from the public (especially Agat fishermen) concern over that and so I'm expecting more people will be coming and maybe some new questions coming up concerning that project as well as the other project will come up, Building 3009 which had PCB contamination and had been cleaned up but they're continuing investigation into potential for more work there."

ROY TSUTSUI (Facilitator):

"Great, and LT. Culbreath wanted to remind everybody that these documents, as well as all the documents if you want to look back at the previous studies and stuffs, are all available as mentioned earlier at the Hagatna Nieves Flores Memorial library. That's the repository for all this information."

(Continued on following page)

NAVY RESTORATION ADVISORY BOARD (RAB) MINUTES:

MIKE GAWEL (Co-Chairperson):

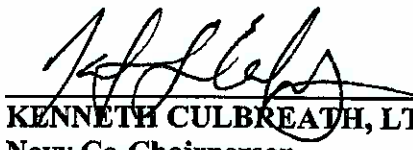
"So please feel free to have some more desserts and ice cream. We're here for a while if you come up with more questions."

ROY TSUTSUI (Facilitator):

"Great, that concludes the meeting."

APPROVED BY:

MICHAEL J. GAWEL
Community Co-Chairperson



KENNETH CULBREATH, LT, CEC, USN
Navy Co-Chairperson